
Exam Review: Unit 2

- Vocabulary

Ratio	Part-to-whole	Part-to-part	Equivalent Ratios
Percent	Rate	Unit Rate	Average Speed

1. Addition and Subtraction.

- | | | |
|--|--------------------------------|--|
| a. $\frac{2}{7} + \frac{5}{7} + \frac{1}{7}$ | b. $\frac{1}{2} + \frac{3}{4}$ | c. $\frac{1}{2} + \frac{5}{8} + \frac{3}{4}$ |
| d. $\frac{2}{3} + \frac{7}{3} + \frac{4}{3}$ | e. $2 - \frac{5}{6}$ | f. $\frac{2}{3} - \frac{5}{15}$ |
| g. $3\frac{1}{5} + 1\frac{1}{5}$ | h. $3 + \frac{2}{11}$ | i. $1\frac{2}{3} + 2\frac{2}{5}$ |
| j. $3\frac{3}{8} - 1\frac{3}{4}$ | k. $1 - \frac{5}{6}$ | l. $3\frac{1}{4} - \frac{1}{2}$ |

2. Write two equivalent ratios for 25 : 30.

3. Which ratios below are equivalent?

- | | | |
|------------------|-----------------|-----------------|
| a. 4:3 & 8:9 | b. 4:3 & 8:6 | c. 1:7 & 3:14 |
| d. 12:15 & 16:20 | e. 4:14 & 12:42 | f. 21:18 & 14:6 |

4. Circle the bigger fraction.

- | | | |
|------------------------------------|---------------------------------------|-------------------------------------|
| a. $\frac{2}{7}$ or $\frac{5}{8}$ | b. $\frac{12}{14}$ or $\frac{15}{17}$ | c. $\frac{21}{18}$ or $\frac{7}{5}$ |
| d. $\frac{8}{12}$ or $\frac{3}{4}$ | e. $\frac{20}{36}$ or $\frac{2}{4}$ | f. $\frac{8}{11}$ or $\frac{5}{7}$ |

5. Convert the following mixed fraction to improper fraction.

- | | |
|-------------------|-------------------|
| a. $3\frac{3}{8}$ | c. $1\frac{3}{5}$ |
| b. $2\frac{1}{3}$ | d. $5\frac{2}{7}$ |

6. Convert the following improper fractions to mixed numbers.

- | | |
|-------------------|-------------------|
| a. $\frac{23}{8}$ | c. $\frac{33}{5}$ |
| b. $\frac{41}{3}$ | d. $\frac{22}{7}$ |

7. Multiplication and Division.

a. $\frac{2}{7} \times \frac{5}{4}$

d. $\frac{1}{2} \div \frac{3}{7}$

g. $5\frac{1}{2} \div \frac{5}{8}$

b. $\frac{2}{3} \times \frac{7}{3}$

e. $\frac{2}{3} \div 4\frac{5}{6}$

h. $5 \times \frac{5}{15}$

c. $\frac{5}{4} \div \frac{1}{10}$

f. $\frac{2}{7} \div 4$

i. $3\frac{1}{5} \div \frac{3}{6}$

8. Convert the percent to a reduced fraction and then a decimal.

a. 12%: _____

b. 36%: _____

c. 50%: _____

d. 42%: _____

e. 51%: _____

f. 35%: _____

g. 20%: _____

9. Convert the fractions to percents.

a. $\frac{4}{25}$

c. $2\frac{1}{2}$

e. $\frac{23}{25}$

g. $1\frac{13}{50}$

b. $\frac{4}{5}$

d. $\frac{3}{50}$

f. $\frac{17}{20}$

h. $\frac{19}{27}$

10. _____ is the only number that is the factor of every number.

11. What is the difference between a factor and a multiple?



a. Part-to-whole ratio of black square is _____

b. 62.5% of the squares are: _____

13. Samuel bought a television for \$450. If 10% tax was charged on the television, what was the tax worth in dollars.

NAME: _____

Math 7

14. A class has 125 students. If 16% of the class is boys. How many boys are there in the class?
15. A class has 125 students. If 16% of the class is boys. How many girls are there in the class?
16. Samuel bought a television for \$450. If he paid \$ 35 as tax, what was the tax percent on the TV?
17. The Simpsons family ordered food at the diner. The bill included 15% tax charged on the original amount. If they paid \$25 as tax what was the original amount on the bill?
18. Katie buys a pair of jeans worth \$65 sold at 10% discount. How much money did she save?
19. Sofia is travelling to the zoo, which is 1400m away from her house. She sleeps for 1575 km while travelling. What percent of the journey was she awake?
20. Frostie Flakes cereal has 17% sugar, while Choco-real cereal has 15% sugar. If Sofia has 102g of Frostie Flakes and Jack has 123g of Choco-real, who consumed more sugar?
21. Jack ate 47% of the marshmallows in a jar. If Jack ate 188 marshmallows, how many marshmallows were in the jar?
22. Jacob has completed 42.5% of his task how much of it is left?
23. The Simpsons family ordered food at the diner. The bill included \$12 tax charged on the original amount of \$75. What percent of the bill was tax?
24. Katie is travelling to the zoo, which is 14,000m away from her house. She sleeps for 15% of the journey. For what distance was Sofia awake?